Amendments to the Specification:

Please replace the table on page 49 with the following amended table:

PANEL 7 PCR PRIMER SEQUENCES		SEQ. ID NO.
221499-UP	tttcacaatt attatatcag cgaagaac	73
221499-LO	ttgatataat taacaaagta cctgaggat	74
89446-UP	tttgataaga taaattgaat tgcaatc	75
89446-LO	ccaggaaatt atcattcagg aaga	76
229291-LO	ctaactgggc atttcaaaat aagct	77
229291-UP	catctcgtaa agaaaaaaac acatc	78
83031-LO	cagattaygc tgaatcatgt acactg	79
83031-UP	tctggccagc attccagc	80
226119-LO	tctaaattga gtcaagatat agaggctttc	81
226119-UP	gaactgacat taataatcaa tgtacttaca	82
60409-UP	tgcaggtgca atgtttatta gctc	83
60409-LO	gtatgggaaa cttaatcttg tatagtaact t	84
220990-UP	acagtaatga gtatagctgt aaattagtta tg	85
220990-LO	aatatgtttt agattcagat ttataatttc c	86
63527-UP	taccactgtt tcctcctttc tttct	87
63527-LO	atttgcccta ggattgagct aac	88
230299-LO	tgcaatttgt tttcacgtat tcg	89
230299-UP	cacaggcctg gaaagggata	90
58040-LO	ygaaaggaaa acctagagag agatt	91
58040-UP	gaaacagaaa gcgccaaaga	92
231480-UP	ctaatattta gagagcagca aggac	93
231480-LO	cttcttcacc cttttccccca	94
62059-UP	tgataagcta caagttcaaa tatactaaac	95
62059-LO	gacatagagc cagattctac cagg	96
		~~97~~
PANEL 7 SNP PRIMER SEQUENCES		SEQ. ID NO.
221449	acgcacgtcc acggtgattt tatcagcgxag aacacttcag ttgtaa	~~98~~ 97
89446	ggatggcgtt ccgtcctatt tgcaatcattt tctgaagttt ctta	~~99~~ 98
229291	cgtgccgctc gtgatagaat aaaacxcatc atagcaatct gtgaata	~~100~~ 99
83031	agcgatctgc gagaccgtat attccagcxa agctttactt ttgataa	~~101~~ 100
226119	gcggtaggtt cccgacatat taataatcaat xtacxtacat aatata	~~102~~ 101
60409	ggctatgatt cgcaatgctt tgtttattagc tcgtttatct tcca	~~103~~ 102

220990	agggtctcta cgctgacgat atagctgtaaa ttagtxatga tataac	~~104~~ 103
63527	gtgattctgt acgtgtcgcc actgtttcctc ctttctttct ctct	~~105~~ 104
230299	gacctgggtg tcgataccta aggcctggaa agggaxattg tgagata	~~106~~ 105
58040	agatagagtc gatgccagct agcgccaaag aacagagtag aacaa	106
62059	agagcgagtg acgcatacta tacaaxttca aatatactaa actattc	~~108~~ 107
231480	cgactgtagg tgcgtaactc atttagagag cagcaaxgac attcctc	~~109~~ 108

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Please replace the table on page 50 with the following amended table:

PANEL 8 PCR PRIMER SEQUENCES		SEQ. ID NO.
56763-UP	cgaattttg tgtaggcagc ct	~~110~~ 109
56763-LO	tctacagag gtagatagaa ttgaatagaa g	~~111~~ 110
61955-UP	tacctctac ttcctttctt atattactct t	~~112~~ 111
61955-LO	gtggatgca ggtcacttat tttg	~~113~~ 112
204593-UP	cacagaatg tgcacagaga ttgac	~~114~~ 113
204593-LO	gacattgta catgatgctg cttag	~~115~~ 114
65068-UP	ctggaattc ttccttctag gtgta	~~116~~ 115
65068-LO	cttccctaa ggctacactt atatattaa	~~117~~ 116
114977-UP	tgctactaa gtctcgatc aattctg	~~118~~ 117
114977-LO	caataatat gtgtttgtta gatcaataca g	~~119~~ 118
148193-LO	tggctcaca cctgtaatcc c	~~120~~ 119
148193-UP	catgagttt tgtgagggta ttcc	~~121~~ 120
66158-UP	cttacagat aagagaatag aataacaaat tac	~~122~~ 121
66158-LO	gaactgttg tgatattgtg gaaaga	~~123~~ 122
69003-UP	aaaatacct ttaacaccta tttagtgtc	~~124~~ 123
69003-LO	ggaaacatt ttgtaaaaaa tcaagta	~~125~~ 124
63811-UP	tcctaaacc aatcccaggg	~~126~~ 125
63811-LO	gctcctcct attacctgca aat	~~127~~ 126
860850-UP	catgcatcc gtccatggg	~~128~~ 127
860850-LO	atttcctga atgactgtgt cca	~~129~~ 128
63189-UP	atccgtcca tgggccact	~~130~~ 129
63189-LO	gctatttcc tgaatgactg tgtcc	~~131~~ 130
126922-UP	gtgctttga taagactgtg atcatcac	~~132~~ 131
126922-LO	gctgcatgg gtccatttgt	~~133~~ 132

PANEL 8 SNP PRIMER SEQUENCES		SEQ. ID NO.
61955	acgcacgtcc acggtgattt cttcctttct tatattactc ttttc	~~134~~ 133
65068	ggatggcgtt ccgtcctatt ttcttccttc taggtgtxta tctatac	~~135~~ 134
114977	cgtgccgctc gtgatagaat taagtxtxax atcaatxctg agaaaga	~~136~~ 135
148193	agcgatctgc gagaccgtat gagggtattc cccaaaxctc tgtgttt	~~137~~ 136
66158	gcggtaggtt cccgacatat gagaatagaa taacaaxtta cttga	~~138~~ 137
56763	ggctatgatt cgcaatgctt ttgtgtaggc agcctttag ctctt	~~139~~ 138
69003	agggtctcta cgctgacgat atacctttaa xacctattta gtgtctt	~~140~~ 139
63811	gtgattctgt acgtgtcgcc aatcccaggg gattxcaggg ttgca	~~141~~ 140
860850	gacctgggtg tcgataccta tccgtccatg gxccacxcgc cgagaca	~~142~~ 141

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63189	agatagagtc gatgccagct tccgtccatg gxccacxcgc cgagaca	~~143~~ 142
126922	agagcgagtg acgcatacta tgtgatcatc acagcaggac agtat	~~144~~ 143
204593	cgactgtagg tgcgtaactc gaatgtgcac agagattgac tccac	~~145~~ 144

Please replace the table on page 51 with the following amended table:

PANEL 9 PCR PRIMER SEQUENCES		SEQ. ID NO.
56593-UP	cagagtggag agtcacaaaa tgg	~~146~~ 145
56593-LO	aatcccttga cactggataa cca	~~147~~ 146
217856-UP	cctctttctc tctcctgatc tgtctat	~~148~~ 147
217856-LO	gatggggtgt gaatatgtat acaga	~~149~~ 148
231735-UP	ctctattatt tataaagggc agaatgag	~~150~~ 149
231735-LO	gcctgtctgt atctctctcc ttc	~~151~~ 150
81917-UP	gctctttcat ctgatgccat ga	~~152~~ 151
81917-LO	gatataggag taatctgaca gcagg	~~153~~ 152
62684-UP	taacacaaag aaagtatgct tttgca	~~154~~ 153
62684-UP	gtatgtggat gaaaatctcg cac	~~155~~ 154
241554-UP	gtgataataa aatttttgtg cctga	~~156~~ 155
241554-LO	catttgtttc acctgtgttc ttaata	~~157~~ 156
126264-UP	ggataatgtt ctccgtaagg tttatac	~~158~~ 157
126264-LO	gagaaacaag cttgccctta acta	~~159~~ 158
224922-UP	caaggaaaac ttacataatc acagc	~~160~~ 159
224922-LO	gaaatataaa agctccacaa atagga	~~161~~ 160
81081-UP	aaagtaggca atactgaaga gtcatac	~~162~~ 161
81081-LO	gttcaattgg cttggaagtt atacc	~~163~~ 162
66561-LO	acttggattt accctcattg atg	~~164~~ 163
66561-UP	cttcctcttt ggtttctgct tttaat	~~165~~ 164
63799-UP	gtgcccagct ccctaatttc t	~~166~~ 165
63799-LO	ctcttgtgac tttcattaac tatcttca	~~167~~ 166
119770-UP	agcctggctg gaaatgaag	~~168~~ 167
119770-LO	cttctaccct cctgtacctg attta	~~169~~ 168

PANEL 9 SNP PRIMER SEQUENCES		SEQ. ID NO.
56593	acgcacgtcc acggtgattt tggagagtca caaaatgxcc cttatta	~~170~~ 169
217856	ggatggcgtt ccgtcctatt tttctctctc ctxatctgtc tatcaaa	~~171~~ 170
231735	cgtgccgctc gtgatagaat tttataaagg gcagaatgag gatta	~~172~~ 171
81917	agcgatctgc gagaccgtat tcatctgatg ccatgagaaa gc	~~173~~ 172
62684	gcggtaggtt cccgacatat agaaagtatx cxttxgcaaa aggtcca	~~174~~ 173
241554	ggctatgatt cgcaatgctt taataaaatt tttgtgcxtg aggtata	~~175~~ 174
126264	agggtctcta cgctgacgat ttctccgtaa ggtttxtaca ttgacta	~~176~~ 175
224922	gtgattctgt acgtgtcgcc cataatcaca gcttttttct cccaa	~~177~~ 176
81081	gacctgggtg tcgatatccta taggcaatac tgaagagtca tacaa	~~178~~ 177

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66561	agatagagtc gatgccagct gxttctgctx ttaatacaaa accag	~~179~~ <u>178</u>
63799	agagcgagtg acgcatacta agctcxctaa tttcttgatg gg	~~180~~ <u>179</u>
119770	cgactgtagg tgcgtaactc tggctggaaa tgaaggaaag gaaag	~~181~~ <u>180</u>

Please replace the table on page 52 with the following amended table:

PANEL 10 PCR PRIMER SEQUENCES		SEQ. ID NO.
63836-LO	ctctggtgcc cgacagc	~~182~~ 181
63836-up	gcatcaggct gcctttcct	~~183~~ 182
58091-UP	ctttttctct ctctctttct tccc	~~184~~ 183
58091-LO	gctcatttat tatggtagac aatcc	~~185~~ 184
68909-UP	gagtgttgg gaagagagac cttc	~~186~~ 185
68909-LO	gctatgtgga cagacccatc tg	~~187~~ 186
238155-UP	ggtacttgat ggcaagaggt aact	~~188~~ 187
238155-LO	aaacttacta tttggataga gtgcttt	~~189~~ 188
201688-LO	ctgtgagcca ggcattcttg	~~190~~ 189
201688-UP	caagtaacct ggcctctctg agat	~~191~~ 190
57849-UP	gctggaccaa ctcccagtg	~~192~~ 191
57849-LO	gtgaatatct ctcctttctc tggg	~~193~~ 192
56915-UP	cctcggttgc ttctctatca taa	~~194~~ 193
56915-LO	cttgtcagga gtcaacagct tc	~~195~~ 194
56608-LO	aggttgagtc tcccccgtg	~~196~~ 195
56608-UP	gtggagccaa ctgggagga	~~197~~ 196
68532-UP	cttttctcaa ctactgtttg tgaca	~~198~~ 197
68532-LO	ccatttgggt gtaggcgg	~~199~~ 198
61500-UP	ttgccagttg tgtatttta tctca	~~200~~ 199
61500-LO	taacttaagc ccaccagtac atact	~~201~~ 200
66026-UP	cccattttta gagtgaaagg ctg	~~202~~ 201
66026-LO	taagtctccc aaggtggata catg	~~203~~ 202
60676-UP	gattcaaggg gatatattaa attagaat	~~204~~ 203
60676-LO	caagttcata ttcctctctt gttctc	~~205~~ 204

PANEL 10 SNP PRIMER SEQUENCES		SEQ. ID NO.
63836	acgcacgtcc acggtgattt caggctgcct ttcctccagg gtcca	~~206~~ 205
60676	ggatggcgtt ccgtcctatt tatattaaat tagaatgttg acctc	~~207~~ 206
58091	cgtgccgctc gtgatagaat cxctctcttt cttcccatag ag	~~208~~ 207
68909	agcgatctgc gagaccgtat tgttxggxag agagaccttc cattcat	~~209~~ 208
238155	gcggtaggtt cccgacatat atggcaagag gtaactcaat ca	~~210~~ 209
201688	ggctatgatt cgcaatgctt ctctctgaga ttcagtttxc acacctg	~~211~~ 210
57849	agggtctcta cgctgacgat ctggaccaac xcxcagtgga gagggta	~~212~~ 211
56915	gtgattctgt acgtgtcgcc cttctctatc ataagcacaa tg	~~213~~ 212
56608	gacctgggtg tcgataccta caactgggag gagggaaatg agaac	~~214~~ 213
68532	agatagagtc gatgccagct ttgtgacaac aatacaccaa gtacc	~~215~~ 214

61500	agagcgagtg acgcatacta gtgtattttt atctcattta tccca	~~216~~ 215
66026	cgactgtagg tgcgtaactc ccatttttag agtgaaaggc tgctc	~~217~~ 216

Please replace the table on page 53 with the following amended table:

PANEL 11 PCR PRIMER SEQUENCES		SEQ. ID NO.
212605-UP	gcctgcttcc cctttatcct	~~218~~ 217
212605-LO	tcttatctcc catcttcctc tacac	~~219~~ 218
220875-UP	ctggcaatct gggcacc	~~220~~ 219
220875-LO	cccaagtcca cacacaaatt at	~~221~~ 220
65882-UP	gtatactaaa gagtctaagt ttttgcctaa	~~222~~ 221
65882-LO	cttccctttt tccttccctt	~~223~~ 222
57575-UP	tgaatagtct ttggtctgag cct	~~224~~ 223
57575-LO	aggcagagtc ttatctggga ca	~~225~~ 224
66683-UP	cagagaattg gagttggctg g	~~226~~ 225
66683-LO	aggaggtagc agtcacactg attc	~~227~~ 226
214674-UP	gacttccgat tgtgaggctg	~~228~~ 227
214674-LO	cctcctttta ttcttgctca tagc	~~229~~ 228
248007-UP	agctcactgg atgcaagagt agt	~~230~~ 229
248007-LO	caagtggata agatgaccca ttc	~~231~~ 230
63804-UP	gatatacagg ggaaacgggc t	~~232~~ 231
63804-LO	cctcaggggg gcactttac	~~233~~ 232
56144-UP	tcaatctttt gatgatgtcc taaga	~~234~~ 233
56144-LO	ttcagcacag tattctagta ttttgtg	~~235~~ 234
233357-UP	cgttactgtc ttcttaccct tcag	~~236~~ 235
233357-LO	ggaagtcatg ctaggctatt ttaa	~~237~~ 236
206538-UP	agggtcgggg gttctgc	~~238~~ 237
206538-LO	ctacagccta gggacagcca g	~~239~~ 238
60188-UP	aggatgcatg catgctgg	~~240~~ 239
60188-LO	ctcagagtat gtgccattgattg	~~241~~ 240

PANEL 11 SNP PRIMER SEQUENCES		SEQ. ID NO.
212605	acgcacgtcc acggtgattt ttccccttta tcctcttcgc agcct	~~242~~ 241
220875	ggatggcgtt ccgtcctatt atctgggcxc caggcaggtg gtcaggc	~~243~~ 242
65882	cgtgccgctc gtgatagaat agtctaagtx tttgcctaaa agcagga	~~244~~ 243
57575	agcgatctgc gagaccgtat tgaatagtct ttxgtctgag cctggaa	~~245~~ 244
66683	gcggtaggtt cccgacatat agagaattgg agttggctgg agata	~~246~~ 245
214674	ggctatgatt cgcaatgctt ccgattgtga ggctgctgag aaggg	~~247~~ 246
248007	agggtctcta cgctgacgat aagagtagtt ggggaaaggg gctgt	~~248~~ 247
63804	gtgattctgt acgtgtcgcc atacagggga aacxggxtcc gagcaga	~~249~~ 248
56144	gacctgggtg tcgataccta tgatgatgtc ctaxgaaata atgactt	~~250~~ 249

233357	agatagagtc gatgccagct ccttcagaag aactcacaaa atacc	~~251~~ 250
60188	agagcgagtg acgcatacta gatgcatgca tgctgxcxtt gaggaac	~~252~~ 251
206538	cgactgtagg tgcgtaactc agggtcgggg gttctxcxtg ttcatct	~~253~~ 252

Please replace the table on page 54 with the following amended table:

PANEL 12 PCR PRIMER SEQUENCES		SEQ. ID NO.
56593-UP	cagagtggag agtcacaaaa tgg	~~254~~ 253
56593-LO	aatcccttga cactggataa cca	~~255~~ 254
217856-UP	cctctttctc tctcctgatc tgtctat	~~256~~ 255
217856-LO	gatggggtgt gaatatgtat acaga	~~257~~ 256
231735-UP	ctctattatt tataaagggc agaatgag	~~258~~ 257
231735-LO	gcctgtctgt atctctctcc ttc	~~259~~ 258
81917-UP	acttagcttg gttctttgtt ttctaattaa c	~~260~~ 259
81917-LO	atggaaaggc agatatagga gtaatct	~~261~~ 260
62684-UP	taacacaaag aaagtatgct tttgca	~~262~~ 261
62684-UP	gtatgtggat gaaaatctcg cac	~~263~~ 262
241554-UP	gtgataataa aatttttgtg cctga	~~264~~ 263
241554-LO	catttgtttc acctgtgttc ttaata	~~265~~ 264
126264-UP	ggataatgtt ctccgtaagg tttatac	~~266~~ 265
126264-LO	gagaaacaag cttgccctta acta	~~267~~ 266
230299-LO	tgcaatttgt tttcacgtat tcg	~~268~~ 267
230299-UP	cacaggcctg gaaagggata	~~269~~ 268
224922-UP	caaggaaaac ttacataatc acagc	~~270~~ 269
224922-LO	gaaatataaa agctccacaa atagga	~~271~~ 270
66561-LO	acttggattt accctcattg atg	~~272~~ 271
66561-UP	cttcctcttt ggtttctgct tttaat	~~273~~ 272
63799-UP	gtgcccagct ccctaatttc t	~~274~~ 273
63799-LO	ctcttgtgac tttcattaac tatcttca	~~275~~ 274
119770-UP	agcctggctg gaaatgaag	~~276~~ 275
119770-LO	cttctaccct cctgtacctg attta	~~277~~ 276

PANEL 12 SNP PRIMER SEQUENCES		SEQ. ID NO.
56593	acgcacgtcc acggtgattt tggagagtca caaaatgxcc cttatta	~~278~~ 277
217856	ggatggcgtt ccgtcctatt tttctctctc ctxatctgtc tatcaaa	~~279~~ 278
231735	cgtgccgctc gtgatagaat tttataaagg gcagaatgag gatta	~~280~~ 279
81917	agcgatctgc gagaccgtat tcatctgatg ccatgagaaa gc	~~281~~ 280
62684	gcggtaggtt cccgacatat agaaagtatx cxttxgcaaa aggtcca	~~282~~ 281
241554	ggctatgatt cgcaatgctt taataaaatt tttgtgcxtg aggtata	~~283~~ 282
126264	agggtctcta cgctgacgat ttctccgtaa ggtttxtaca ttgacta	~~284~~ 283

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224922	gtgattctgt acgtgtcgcc cataatcaca gctttttttct cccaa	~~285~~ 284
230299	gacctgggtg tcgataccta aggcctggaa agggaxattg tgagata	~~286~~ 285
66561	agatagagtc gatgccagct gxttctgctx ttaatacaaa accag	~~287~~ 286
63799	agagcgagtg acgcatacta agctcxctaa tttcttgatg gg	~~288~~ 287
119770	cgactgtagg tgcgtaactc tggctggaaa tgaaggaaag gaaag	~~289~~ 288

Please replace page 55 with the following amended table:

PANEL 13 PCR PRIMER SEQUENCES		SEQ. ID NO.
63836-UP	gcatcaggct gcctttcct	~~290~~ 289
63836-LO	ctctggtgcc cgacagc	~~291~~ 290
220875-UP	ctggcaatct gggcacc	~~292~~ 291
220875-LO	cccaagtcca cacacaaatt at	~~293~~ 292
58091-UP	aatacttcat ctctgggggc a	~~294~~ 293
58091-LO	gctcatttat tatggtagac aatcc	~~295~~ 294
68909-UP	gagtgttggg aagagagacc ttc	~~296~~ 295
68909-LO	gctatgtgga cagacccatc tg	~~297~~ 296
238155-UP	ggtacttgat ggcaagaggt aact	~~298~~ 297
238155-LO	aaacttacta tttggataga gtgcttt	~~299~~ 298
201688-UP	caagtaacct ggcctctctg agat	~~300~~ 299
201688-LO	ctgtgagcca ggcattcttg	~~301~~ 300
57849-UP	gctggaccaa ctcccagtg	~~302~~ 301
57849-LO	gtgaatatct ctcctttctc tggg	~~303~~ 302
56915-UP	cctcggttgc ttctctatca taa	~~304~~ 303
56915-LO	cttgtcagga gtcaacagct tc	~~305~~ 304
56608-UP	gtggagccaa ctgggagga	~~306~~ 305
56608-LO	aggttgagtc tcccccgtg	~~307~~ 306
68532-UP	cttttctcaa ctactgtttg tgaca	~~308~~ 307
68532-LO	ccatttgggt gtaggcgg	~~309~~ 308
62059-UP	tgataagcta caagttcaaa tatactaaac	~~310~~ 309
62059-LO	gacatagagc cagattctac cagg	~~311~~ 310
66026-UP	cccattttta gagtgaaagg ctg	~~312~~ 311
66026-LO	taagtctccc aaggtggata catg	~~313~~ 312

PANEL 13 SNP PRIMER SEQUENCES		SEQ. ID NO.
63836	acgcacgtcc acggtgattt caggctgcct ttcctccagg gtcca	~~314~~ 313
220875	ggatggcgtt ccgtcctatt atctgggcxc caggcaggtg gtcaggc	~~315~~ 314
58091	cgtgccgctc gtgatagaat cxctctcttt cttcccatag ag	~~316~~ 315
68909	agcgatctgc gagaccgtat tgttxggxag agagaccttc cattcat	~~317~~ 316
238155	gcggtaggtt cccgacatat atggcaagag gtaactcaat ca	~~318~~ 317
201688	ggctatgatt cgcaatgctt ctctctgaga ttcagtttxc acacctg	~~319~~ 318
57849	agggtctcta cgctgacgat ctggaccaac xcxcagtgga gagggta	~~320~~ 319
56915	gtgattctgt acgtgtcgcc cttctctatc ataagcacaa tg	~~321~~ 320
56608	gacctgggtg tcgataccta caactgggag gagggaaatg agaac	~~322~~ 321

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68532	agatagagtc gatgccagct ttgtgacaac aatacaccaa gtacc	~~323~~ 322
62059	agagcgagtg acgcatacta tacaaxttca aatatactaa actattc	~~324~~ 323
66026	cgactgtagg tgcgtaactc ccatttttag agtgaaaggc tgctc	~~325~~ 324

Please replace the table on page 56 with the following amended table:

PANEL 14 PCR PRIMER SEQUENCES		SEQ. ID NO.
		~~326~~
76268-UP	ctgtttcatt tcagcccttt tag	~~327~~ 325
76268-LO	gttatcctta gtgagttttc tgtctaca	~~328~~ 326
70371-UP	gcgtcatatg gagcctcct	~~329~~ 327
70371-LO	ctcatctggc cttctgtgtc c	~~330~~ 328
58388-UP	ctgcagttca ggtggctgtt	~~331~~ 329
58388-LO	cctcgtctcc aagggtgtct	~~332~~ 330
105677-UP	agccattaga cctgccaatc	~~333~~ 331
105677-LO	aatgcagagg ccaccagc	~~334~~ 332
226119-UP	gaactgacat taataatcaa tgtacttaca	~~335~~ 333
226119-LO	tctaaattga gtcaagatat agaggctttc	~~336~~ 334
63184-UP	ctcaagcact ctctctttc atca	~~337~~ 335
63184-LO	ggagtccagg tagataggaa cactag	~~338~~ 336
63979-UP	gtgatacacg aaggcagatg at	~~339~~ 337
63979-LO	gactgtgaat gtacttagcc ccc	~~340~~ 338
130240-UP	caacaggaag cgaggcc	~~341~~ 339
130240-LO	acaaggcagg accaaggc	~~342~~ 340
182622-UP	gggcttgtgt gtccacaga	~~343~~ 341
182622-LO	tgtgtcagga agaagaagat caac	~~344~~ 342
66567-UP	ctgaacccaa gaacttcctg at	~~345~~ 343
66567-LO	tgatgagtat ataaccagaa ggaacac	~~346~~ 344
89614-UP	agcagaggat ggcagtcacc	~~347~~ 345
89614-LO	cacctctgtt cctgttttct gtta	~~348~~ 346
219561-UP	cagtactatc tcttctttaa agatctgaaa	~~349~~ 347
219561-LO	acccagctca agatgctctg	~~350~~ 348

PANEL 14 SNP PRIMER SEQUENCES		SEQ. ID NO.
76268	acgcacgtcc acggtgattt ttaggtatag ttgattgttt taaga	~~351~~ 349
70371RT	ggatggcgtt ccgtcctatt gcgtcatatg xagcctxctg ggacaag	~~352~~ 350
58388	cgtgccgctc gtgatagaat ttcaggtggc tgtttcagag ctcag	~~353~~ 351
105677	agcgatctgc gagaccgtat cxattagacc tgccaatcxc ctggaga	~~354~~ 352
226119	gcggtaggtt cccgacatat taataatcaa txtacxtaca taatata	~~355~~ 353
63184	ggctatgatt cgcaatgctt cactctctct tttcatcact catct	~~356~~ 354
63979	agggtctcta cgctgacgat cacgaaxgca gatxatxacg tcgcct	~~357~~ 355
130240	gtgattctgt acgtgtcgcc gaagcgaggc cxcaggtcaa ggtggga	~~358~~ 356

16

182622	gacctgggtg tcgatsccta tgtgtcxaca gacagtggcg ggcttca	~~359~~ 357
66567	agatagagtc gatgccagct caagaactxc ctgatatggg aatcaaa	~~360~~ 358
89614	agagcgagtg acgcatacta cagtcaccct cagagcccag aa	~~361~~ 359
219561	cgactgtagg tgcgtaactc tgaaagtaga accaatcaag gctcc	~~362~~ 360

Please replace the table on page 57 with the following amended table:

PANEL 15 PCR PRIMER SEQUENCES		SEQ. ID NO.	
216327-UP	cagtgggctc tatttttttc taactt	~~363~~	361
216327-LO	tggtctctca gctatggcct t	~~364~~	362
248075-UP	gatcaaaaaa gcatgagttc ttatta	~~365~~	363
248075-LO	cctcactaat ggtgacacaa caag	~~366~~	364
85187-UP	cccaggcaat taatgagtct g	~~367~~	365
85187-LO	gtttatatat taggaacttt taggggag	~~368~~	366
225225-UP	ctagacctaa atagtggccc taaat	~~369~~	367
225225-LO	ctctactgaa gacaaactta gaggaatg	~~370~~	368
82031-UP	ttgacatctt cttagattct aaaatcac	~~371~~	369
82031-LO	ctgttggctt ttaaggtctc c	~~372~~	370
60409-UP	tgcaggtgca atgtttatta gctc	~~373~~	371
60409-LO	gtatgggaaa cttaatcttg tatagtaact t	~~374~~	372
221499-UP	tttcacaatt attatatcag cgaagaac	~~375~~	373
221499-LO	ttgatataat taacaaagta cctgaggat	~~376~~	374
168115-UP	tcctgtagca ttggaaaact gt	~~377~~	375
168115-LO	agaaactgga gttactcttg tcaga	~~378~~	376
177589-UP	ctgaggaaga gtgcagcata ctc	~~379~~	377
177589-LO	caggcatagg gttgggatg	~~380~~	378
173632-UP	gactcttcat ggccaacacc	~~381~~	379
173632-LO	attttgccac tagtttttac atctcta	~~382~~	380
60188-UP	aggatgcatg catgctgg	~~383~~	381
60188-LO	ctcagagtat gtgccattga ttg	~~384~~	382
231480-UP	ctaatattta gagagcagca aggac	~~385~~	383
231480-LO	cttcttcacc cttttcccca	~~386~~	384

PANEL 15 SNP PRIMER SEQUENCES		SEQ. ID NO.	
216327	acgcacgtcc acggtgattt ctattttttt ctaacttcag aattt	~~387~~	385
248075RT	ggatggcgtt ccgtcctatt gcatgagttc ttattattca ccaca	~~388~~	386
85187	cgtgccgctc gtgatagaat gcaattaatg agtctgxtaa accta	~~389~~	387
225225	agcgatctgc gagaccgtat ccctaaattt gtgttaxgcx ttcccta	~~390~~	388
82031	gcggtaggtt cccgacatat tagattctxa aatcacttta ttcatac	~~391~~	389
60409	ggctatgatt cgcaatgctt tgtttattag ctcgtttatc ttcca	~~392~~	390
221499RT	agggtctcta cgctgacgat tatcagcgxa gaacacttca gttgtaa	~~393~~	391
168115	gtgattctgt acgtgtcgcc aaactgttgt tcattttctc accac	~~394~~	392
177589	gacctgggtg tcgataccta gtgcagcata ctcattcaca ga	~~395~~	393

173632	agatagagtc gatgccagct tcatggccaa caxcaggtag tcagtat	~~396~~ 394
60188	agagcgagtg acgcatacta gatgcatgca tgctgxcxtt gaggaac	~~397~~ 395
231480	cgactgtagg tgcgtaactc atttagagag cagcaaxgac attcctc	~~398~~ 396

Please replace the table on page 58 with the following amended table:

PANEL 16 PCR PRIMER SEQUENCES		SEQ. ID NO.
61955-UP	tacctctact tcctttctta tattactctt	~~399~~ 397
61955-LO	gtggatgcag gtcacttatt ttg	~~400~~ 398
65068-UP	ctggaattct tccttctagg tgta	~~401~~ 399
65068-LO	cttccctaag gctacactta tatattaa	~~402~~ 400
65882-UP	gtatactaaa gagtctaagt ttttgcctaa	~~403~~ 401
65882-LO	cttccctttt tccttccctt	~~404~~ 402
148193-UP	catgagtttt gtgagggtat tcc	~~405~~ 403
148193-LO	tggctcacac ctgtaatccc	~~406~~ 404
66158-UP	cttacagata agagaataga ataacaaatt ac	~~407~~ 405
66158-LO	gaactgttgt gatattgtgg aaaga	~~408~~ 406
56763-UP	cgaattttgt gtaggcagcc t	~~409~~ 407
56763-LO	tctacagagg tagatagaat tgaatagaag	~~410~~ 408
69003-UP	aaaatacctt taacacctat ttagtgtc	~~411~~ 409
69003-LO	ggaaacattt tgtaaaaaat caagta	~~412~~ 410
212605-UP	gcctgcttcc cctttatcct	~~413~~ 411
212605-LO	tcttatctcc catcttcctc tacac	~~414~~ 412
860850-UP	catgcatccg tccatggg	~~415~~ 413
860850-LO	atttcctgaa tgactgtgtc ca	~~416~~ 414
235106-UP	gcttttgaaa aaaataaaa ttgc	~~417~~ 415
235106-LO	ggacccattt atagttttttt aactttg	~~418~~ 416
126922-UP	gtgctttgat aagactgtga tcatcac	~~419~~ 417
126922-LO	gctgcatggg tccatttgt	~~420~~ 418
206538-UP	agggtcgggg gttctgc	~~421~~ 419
206538-LO	ctacagccta gggacagcca g	~~422~~ 420

PANEL 16 SNP PRIMER SEQUENCES		SEQ. ID NO.
61955	acgcacgtcc acggtgattt cttcctttct tatattactc ttttc	~~423~~ 421
65068	ggatggcgtt ccgtcctatt ttcttccttc taggtgtxta tctatac	~~424~~ 422
65882	cgtgccgctc gtgatagaat agtctaagtx tttgcctaaa agcagga	~~425~~ 423
148193	agcgatctgc gagaccgtat gagggtattc cccaaaxctc tgtgttt	~~426~~ 424
66158	gcggtaggtt cccgacatat gagaatagaa taacaaxtta cttga	~~427~~ 425
56763	ggctatgatt cgcaatgctt ttgtgtaggc agccttttag ctctt	~~428~~ 426
69003	agggtctcta cgctgacgat atacctttaa xacctattta gtgtctt	~~429~~ 427
212605RT	gtgattctgt acgtgtcgcc ttcccctta tcctcttcgc agcct	~~430~~ 428

860850	gacctgggtg tcgatacscta tccgtccatg gxccacxcgc cgagaca	~~431~~ 429
235106	agatagagtc gatgccagct axaaataxaa ttgcttttga atactga	~~432~~ 430
126922	agagcgagtg acgcatacta tgtgatcatc acagcaggac agtat	~~433~~ 431
206538	cgactgtagg tgcgtaactc agggtcgggg gttctxcxtg ttcatct	~~434~~ 432

Please replace the table on page 59 with the following amended table:

PANEL 17 PCR PRIMER SEQUENCES		SEQ. ID. NO.
228468-UP	cctactttca gatcctgagt cttgt	~~435~~ 433
228468-LO	gcctctggtg ttatttagac tcc	~~436~~ 434
214674-UP	gacttccgat tgtgaggctg	~~437~~ 435
214674-LO	cctccttta ttcttgctca tagc	~~438~~ 436
126243-UP	ccagtgtttg aatgccgct	~~439~~ 437
126243-LO	gaagcggagg tttcagcag	~~440~~ 438
207160-UP	tgaatgaatt aacaaagtca tggag	~~441~~ 439
207160-LO	ctctgccccc attccaac	~~442~~ 440
66683-UP	cagagaattg gagttggctgg	~~443~~ 441
66683-LO	aggaggtagc agtcacactgattc	~~444~~ 442
211324-UP	tgccacacag tttggagtga	~~445~~ 443
211324-LO	cattcaatgg gggagatgg	~~446~~ 444
214373-UP	ctggcaggca agagatgtga	~~447~~ 445
214373-LO	gactggaaag gaacaaagag gtg	~~448~~ 446
234217-UP	acagtcattt gtacttacgg agcg	~~449~~ 447
234217-LO	gagcctgcct caacgagaag	~~450~~ 448
63404-UP	aggggctarg tttggagaag ag	~~451~~ 449
63404-LO	aatgcaaaga ccacatctat caat	~~452~~ 450
72171-UP	cacctgacct ccagcaagag	~~453~~ 451
72171-LO	ggtgtgtccc tgtgtgtagt gg	~~454~~ 452
Amel-2-short-UP	ccagataaag tggtttctca agtg	~~455~~ 453
Amel-2-short-LO	gggaagctgg tggtaggaac	~~456~~ 454

PANEL 17 SNP PRIMER SEQUENCES		SEQ. ID NO.
228468	acgcacgtcc acggtgattt tcctgagtct tgttttgacc catga	~~457~~ 455
214674RT	ggatggcgtt ccgtcctatt ccgattgtga ggctgctgag aaggg	~~458~~ 456
126243	cgtgccgctc gtgatagaat aatgccgctg tgagacaaag gg	~~459~~ 457
207160	agcgatctgc gagaccgtat aacaaagtca tggagaaatc aactc	~~460~~ 458
66683	gcggtaggtt cccgacatat agagaattgg agttggctgg agata	~~461~~ 459
211324	ggctatgatt cgcaatgctt tttgccacac agttxggagt gacccaa	~~462~~ 460
214373RT	agggtctcta cgctgacgat ggcaagagat gtgacaggca agagt	~~463~~ 461
234217	gacctgggtg tcgataccta acttacggag cgctctttgt gagaa	~~464~~ 462
63404	agatagagtc gatgccagct rgtttggaga xgagcctacr tcttaac	~~465~~ 463
72171	cgactgtagg tgcgtaactc tccaxcaaga ggaatxcaag aatgcta	~~466~~ 464
Amel-2U8	gtgattctgt acgtgtcgcc gataaagtgg tttctcaagt ggtcc	~~467~~ 465

Please insert the enclosed paper copy of the sequence listing into the application immediately following page 69.